Amendments to the Claims

This listing of claims replaces prior versions:

Claim 1 (currently amended): An apparatus for assessing quality of a picture in transmission on a picture transmission path having a plurality of transmission processing units connected in series, the apparatus comprising:

means for extracting characteristic values of a picture transmitted on the picture transmission path at predetermined points on the picture transmission path, wherein the apparatus assesses the picture quality of the picture based on the characteristic values of the picture,

wherein the apparatus does not require that the characteristic values, which are extracted from the picture transmission path, be reinserted back into the picture transmission path, and

wherein the apparatus does not require that characteristic values extracted at one of the predetermined points be delayed in time for synchronization to match characteristic values extracted at another of the predetermined points.

Claim 2 (currently amended): An apparatus for remote-monitoring quality of a picture in transmission that monitors quality of a picture in transmission on a picture transmission path having a plurality of transmission processing units connected in series, the apparatus comprising:

means for extracting characteristic values of a picture transmitted on the picture transmission path at predetermined points on the picture transmission path;

transmission means for transmitting characteristic values extracted by the characteristic value extracting means, from each of the points to a central monitoring unit at a low bit rate; and

the central monitoring unit for deciding whether an abnormality has occurred in the picture quality or not, based on the characteristic values transmitted from the respective points by the transmission means,

wherein the apparatus does not require that characteristic values extracted at one of the predetermined points be delayed in time for synchronization to match characteristic values extracted at another of the predetermined points.

Claim 3 (currently amended): [[The]] An apparatus for remote-monitoring picture quality of a picture in transmission ~~according to claim 2~~ that monitors quality of a picture in transmission on a picture transmission path having a plurality of transmission processing units connected in series, the apparatus comprising:

means for extracting characteristic values of a picture transmitted on the picture transmission path at predetermined points on the picture transmission path;

transmission means for transmitting characteristic values extracted by the characteristic value extracting means, from each of the points to a central monitoring unit at a low bit rate; and

the central monitoring unit for deciding whether an abnormality has occurred in the picture quality or not, based on the characteristic values transmitted from the respective points by the transmission means,

wherein the central monitoring unit comprises:

means for handling the characteristic values as time-series data, and frequency-converting the time-series data;

means for extracting amplitude components from the data obtained by the frequency conversion; and

means for comparing the characteristic values between a plurality of points, based on a comparison of the amplitude components.

Claim 4 (original): The apparatus for remote-monitoring picture quality of a picture in transmission according to claim 2, wherein said transmission means is one of a telephone network, a LAN and an IP network.